

# Trinity, College udhyavara udupi

## ITI Quiz W/C- 04-Apr-2026 9:30AM

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84.00% 42 / 50

Student Name	Bhuvan	Access Code	8504
Attempt No.	#1	Completion Time	10:24 AM
Rank	#3	Total Questions	50

42 SCORE

50 MAX MARKS

42 CORRECT

8 INCORRECT

### Answer Review

Q1 **INCORRECT** Which affects the centre of gravity of the object?

A. Weight

B. Mass

C. Density

D. Shape

Q2 **CORRECT** What is the name of the point at which all the weight of the body concentrated?

A. Initial point

B. Centre of gravity

C. Centroid

D. Central point

Q3 **CORRECT** Where the centre of gravity of a circle lies?

A. At its centre

B. Any where on its radius

C. Any where on its circumference

D. Any where on its diameter

Q4 **CORRECT** What is the centre of gravity of a right circular cone from its base?

A.  $h/2$

B.  $h/3$

C.  $h/4$

D.  $h/5$

Q5 **CORRECT** What is the centre of gravity of a rectangular body?

A. Longer side of rectangle

B. Shorter side of rectangle

C. At the point of intersection of its diagonals

D. At the corners

Q6 **CORRECT** What is the centre of gravity of a solid hemisphere from its base?

A.  $4r/5$

B.  $3r/8$

C.  $3r/4$

D.  $r/2$

**Q7** **CORRECT** What is the centre of gravity of a sphere?

**A.** At the centre

**B.** On the circumference

**C.** At the diameter

**D.** At the radius

**Q8** **CORRECT** Which state of equilibrium's example is A cone resting on its tip?

**A.** Stable

**B.** Neutral

**C.** Unstable

**D.** Horizontal

**Q9** **CORRECT** Which one of the following geometrical shapes centre of gravity lies from its base is  $\frac{1}{3}$  of its height?

**A.** Square

**B.** Rhombus

**C.** Triangle

**D.** Cone

**Q10** **CORRECT** Which state of equilibrium's example is, A cone resting on its base?

**A.** Un-stable

**B.** Neutral

**C.** Stable

**D.** Bothe A and B

Q11 **CORRECT** Which is elastic material?

A. Nylon

B. Polystyrenes

C. Celluloid

D. Polycarbonates

Q12 **CORRECT** Which is thermo plastic material?

A. Butyl rubber

B. Nylon

C. Neoprene

D. Vinyl polymers

Q13 **INCORRECT** What is the maximum percentage of stretch of its original length is allowable for elastic materials?

A. 100%

B. 200%

C. 300%

D. 400%

Q14 **CORRECT** What is the ratio between the change in dimension to its original dimension of the substance?

A. Stress

B. Strain

C. Poisson's ratio

D. Factor of safety

Q15 **CORRECT** What is the unit of strain?

A.  $\text{Kg/cm}^2$

B.  $\text{Newton/metre}^2$

C. Metre

D. No unit

Q16 **CORRECT** What is the ratio of change in length to original length?

A. Linear strain

B. Lateral strain

C. Volumetric strain

D. Poisson's ratio

Q17 **INCORRECT** What is the ratio between lateral strain and longitudinal strain?

A. Hooks law

B. Young's modulus

C. Bulk modulus

D. Poisson's ratio

Q18 **CORRECT** Which symbol is used to express change in length?

A. L

B.  $\Delta l$

C. l

D. e

Q19 **CORRECT** Which one is the ratio of stress?

A. Load and area

B. Load and direction

C. Load and diameter

D. Load and time

Q20 **CORRECT** Which force acts on rivets?

A. Tensile force

B. Compressive force

C. Shear force

D. Bending force

Q21 **CORRECT** What is the formula for bulk modulus?

A. Tensile stress/Tensile strain

B. Compressive stress/Compressive strain

C. Volumetric stress/Volumetric strain

D. Shear stress/Shear strain

Q22 **CORRECT** Which law states that within elastic limit stress is directly proportional to strain?

A. Newtons law

B. Hooks law

C. Joules law

D. Charles law

**Q23** **CORRECT** What is the term used for maximum stress attained by a material before rupture?

- A. Tensile stress
- B. Compressive stress
- C. Working stress
- D. Ultimate stress

**Q24** **CORRECT** What is the ratio between ultimate stress to working stress?

- A. Bulk modulus
- B. Young's modulus
- C. Factor of safety
- D. Modulus of rigidity

**Q25** **CORRECT** What is the ratio of ultimate load to area of original cross section?

- A. Factor of safety
- B. Yield point
- C. Ultimate stress
- D. Young's modulus

**Q26** **CORRECT** What is the ratio of shear stress to shear strain?

- A. Modulus of elasticity
- B. Modulus of rigidity
- C. Bulk modulus
- D. Yield point

Q27 **CORRECT** What is the ratio between stress and strain?

- A. Yield point
- B. Factor of safety
- C. Young's Modulus
- D. Poisson's ratio

Q28 **INCORRECT** Which force acts on crank shaft?

- A. Shear stress
- B. Torsional stress
- C. Tensile stress
- D. Compressive stress

Q29 **INCORRECT** Which is thermosetting plastic?

- A. Vinyl polymers
- B. Polystyrenes
- C. Celluloid
- D. Melamine resins

Q30 **CORRECT** What force will be required to punch a hole of 10 mm dia in a 1 mm thick plate, if the allowable shear stress is  $50\text{N/mm}^2$ ? ( $\pi = 22/7$ )

- A. 1757 N
- B. 1575 N
- C. 1571.4 N
- D. 1577 N

Q31 **CORRECT** What is the tensile stress if a square rod of 10 mm side is tested for a tensile load of 1000 kg?

A.  $1 \text{ kg/mm}^2$

B.  $10 \text{ kg/mm}^2$

C.  $100 \text{ kg/mm}^2$

D.  $1000 \text{ kg/mm}^2$

Q32 **CORRECT** What is the tensile strain if a force of 3.2 kN is applied to a bar of original length 2800 mm extends the bar by 0.5 mm?

A. 0.0001786

B. 0.0001687

C. 0.0001867

D. 0.0001968

Q33 **CORRECT** How much strain is developed in an iron rod of 1 metre length gets elongated by 1 cm, if a force of 100 kg is applied at one end?

A. 0.1

B. 0.01

C. 0.001

D. 0.0001

Q34 **CORRECT** What is the young's modulus if a wire of 2m long,  $0.8 \text{ mm}^2$  in cross section increases its length by 1.6 mm on suspension of 8 kg weight from it?

A.  $1.25 \text{ kg/mm}^2$

B.  $12.5 \text{ kg/mm}^2$

C.  $125 \text{ kg/mm}^2$

D.  $12500 \text{ kg/mm}^2$

Q35 **CORRECT** What is the safe stress if the ultimate stress of a material is  $35 \text{ kg/mm}^2$  and factor of safety is 5?

A. 0.143

B. 0.7

C. 1.43

D. 7

Q36 **CORRECT** What is a under estimate?

A. No work started as per estimate

B. An estimate perfectly matches with actual

C. An estimate is fell short of the actual estimate

D. An estimate is exceeded the actual estimate

Q37 **CORRECT** What is the main factor to be considered while preparing a detailed estimate?

A. Shape of material

B. Brand of the materials

C. Quantity, availability and transportation of materials

D. Location of material

Q38 **CORRECT** Which authority publishes schedule of rates?

A. Individual

B. Corporate

C. Partnership firm

D. Government department

Q39 **CORRECT** Which IE rules are to be verified on completion of wiring on any new installation?

A. IE Rules, 1956

B. IE Rules, 1960

C. IE Rules, 1961

D. IE Rules, 1967

Q40 **CORRECT** What is the total labour charges for a particular wiring work completed in 2 days by one electrician and one helper.(Electrician @ ₹800/day and helper @ Rs 400/day)

A. Rs. 2000

B. Rs. 2400

C. Rs. 3000

D. Rs. 1400

Q41 **INCORRECT** Which affects the centre of gravity of the object

A. Weight

B. Mass

C. Density

D. Shape

Q42 **CORRECT** What is the name of the point at which all the weight of the body concentrated?

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Q43 **CORRECT** Where the centre of gravity of a circle lies?

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B.  $h/3$

C.  $h/4$

D.  $h/5$

Q45 **INCORRECT** What is the centre of gravity of a rectangular body?

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C. At the point of intersection of its diagonals

D. At the corners

Q46 **INCORRECT** What is the centre of gravity of a solid hemisphere from its base?

A.  $4r/5$

B.  $3r/8$

C.  $3r/4$

D.  $r/2$

Q47 **CORRECT** What is the centre of gravity of a sphere?

A. At the centre

B. On the circumference

C. At the diameter

D. At the radius

Q48 **CORRECT** Which state of equilibrium's example is A cone resting on its tip?

A. Stable

B. Neutral

C. Unstable

D. Horizontal

Q49 **CORRECT** Which one of the following geometrical shape's centre of gravity lies from its base is  $\frac{1}{3}$  of its height?

A. Square

B. Rhombus

C. Triangle

D. Cone

Q50 **CORRECT** Which state of equilibrium's example is, A cone resting on its base?

A. Un-stable

B. Neutral

C. Stable

D. Bothe A and B